

Appl. No. 10/711,567
Reply to Office action of December 17, 2007

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Amendments to the Drawings:

Figure 4 has been amended to replace the legend of "Reference Art" with "Prior Art".
No other changes have been made, and no new matter is added.

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Acceptance of the corrected drawings is respectfully requested.

Attachment: Replacement Sheet

1 page

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REMARKS/ARGUMENTS

Request for Continued Examination:

The applicant respectfully requests continued examination of the above-indicated
5 application as per 37 CFR 1.114.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lai (US 2004/0261693) in view of Ishibashi (US 5,923,950).

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Response:

Claim 1 has been amended to specify that the first temperature in which the first reaction source comprising the first group III element is introduced into the chamber is different from the second temperature in which the second reaction source comprising the second group III element and the third reaction source comprising nitrogen are introduced into the chamber.
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As noted in the Office Action, Lai does not teach the process of introducing the reaction sources comprising the first group III element, the second group III element, and nitrogen into a chamber for forming the buffer layer.
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Ishibashi teaches introducing TMA and NH₃ at the same time into a furnace having a temperature of 1090°C for forming the AlN buffer 12. Even if the Examiner considers Ishibashi's single crystal layer 13 to be a buffer layer, the process for creating the single crystal layer 13 still involves introducing TMA, TMG, TMI, and NH₃ at the same time. Thus, Ishibashi does not teach the claimed steps of introducing the first group III element into the chamber at a **first temperature**, and introducing the second group III element and the nitrogen element into the chamber at a **second temperature**, where the first temperature is different from the second temperature, as is claimed in claim 1.
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For the above reasons, the applicant submits that the combination of Lai and Ishibashi fails to teach all of the claimed limitations contained in claim 1. Claims 2-8 are dependent on claim 1, and should be allowed if claim 1 is allowed.

5 Reconsideration of claims 1-8 is therefore respectfully requested.

Introduction to new claims 20-25:

New dependent claims 20-21 and 23-25 are supported in the original claim 1. Independent claim 22 claims the step of introducing second and third reaction sources into the chamber subsequent to the step of introducing a first reaction source into the chamber. Claim 22 is supported throughout the specification. No new matter is added through the introduction of new claims 20-25.

15 Regarding claim 22, since Ishibashi teaches introducing TMA, TMG, TMI, and NH₃ at the same time, Ishibashi does not teach the step of introducing second and third reaction sources into the chamber subsequent to the step of introducing a first reaction source into the chamber. Therefore, claim 22 is patentable over the cited prior art. Claims 20-21 and 23-25 are dependent upon claims 1 and 22, and should be allowed if their respective base claims are allowed. Consideration of 20 new claims 20-25 is respectfully requested.

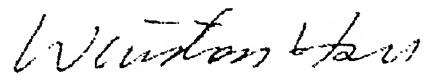
Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

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Sincerely yours,



Date: 03/11/2008

Winston Hsu, Patent Agent No. 41,526

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- 10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)